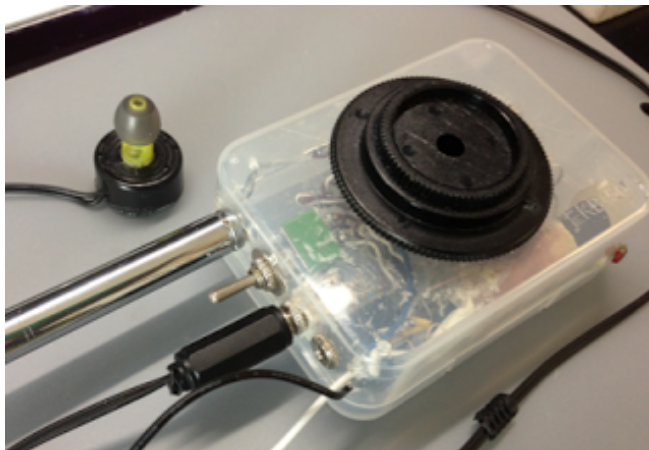


28th June 2013 AM/FM/Loop Crystal Radio



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Build a multifunction battery free crystal radio to listen to either AM or FM radio.

You can also use the same radio to connect to a bigger loop coil to get stronger signal for the AM radio instead of relying on the smaller AM coil inside the radio.

Parts you will need:

A Diode that works in high frequency (200Mhz or above, e.g. AA112, 1N34A, 1N48, 1ss86 or 1ss106.

A Diode that work in AM frequency e.g 1N34A, 1N60, BAT85.

A quadruple PVC Variable capacitor with one end for 2x 20pf, the other end for 2x 140pf.

50pf and 180pf fixed ceramic capacitor

100K 1/4W resistor

33uH Choke coil.

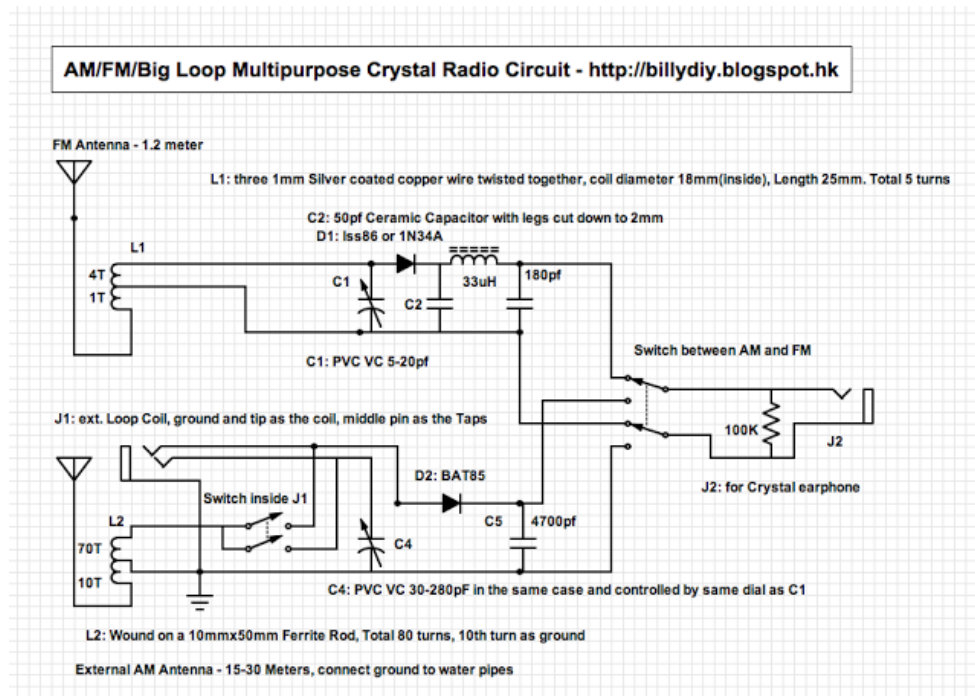
AM radio coil - ferrite rod

3.5mm mono headphone jack

3.5mm stereo headphone jack with internal switches (for selecting whether to use the external big loop or the internal coil for AM.

A 2 by 3 switch to select AM or FM.

A high impedance 4K Ohm earphone or a crystal earphone.



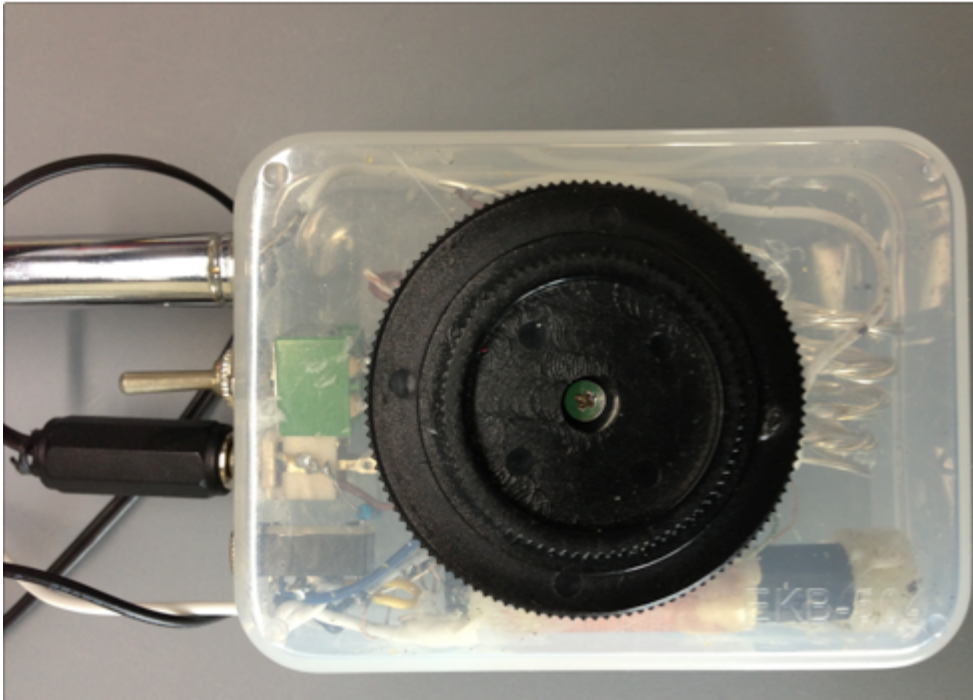
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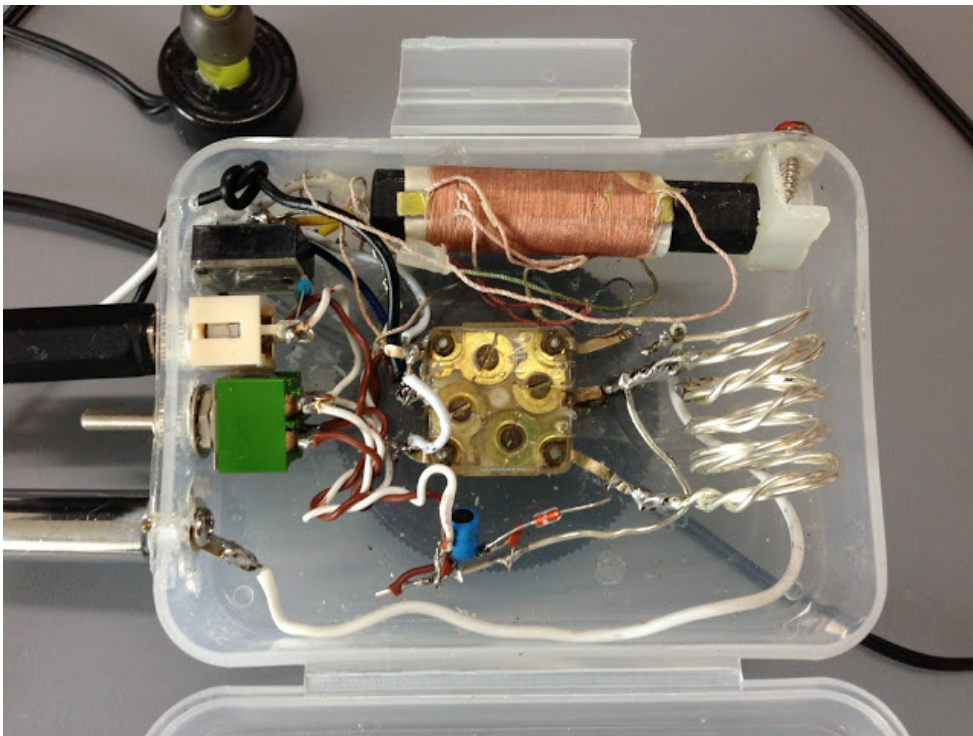
To connect to external Loop coil for AM reception instead of using the internal AM coil, connect 3-color crocodile camp to the 3.5mm Stereo jack - white for the tuning, black for ground, yellow for the decoder diode.



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Posted 28th June 2013 by Billy

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